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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,264	10/15/2003	Marshall T. Savage	RM607a	9952

23996 7590 10/28/2005

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EXAMINER

BATES, ZAKIYA W

ART UNIT PAPER NUMBER

3676

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/687,264	Applicant(s) SAVAGE, MARSHALL T.	
	Examiner Zakiya W. Bates	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10152003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. The claim for priority has been canceled by the preliminary amendment filed 10/20/04. Further, the preliminary amendment filed 10/20/04, page 1, last sentence, the term "line 7" has been replaced with --line 9-- by informal examiner's amendment in order to correct an obvious typographical error.

Claim Objections

2. Claim 9 is objected to because of the following informalities: formatting errors to parts (a) and (b) should be corrected. Part (b) should begin with the term "inserting." Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al.

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Zhang et al. discloses a downhole fuel-cell system that comprises a heater including a plurality of fuel cells (within 10), and a plurality of conduits 18, 24. The reference further teaches two electrodes (between 50), insulated casing 22 (insulation taught in par. 0059 and 0061), at least one plate 32, 36, 40 (530), plural holes 532, plural spacers 50, 52, and plural connected segments 12, 14. With respect to the method claims, the reference teaches forming a hole 200, inserting a heater 10, operating fuel cells, generating gaseous product from the formation, filling gap with insulating substance (for casing 22), using electrical output to power other heaters 206, and using warm exhaust to heat formation (par. 0065).

5. Claims 1-45 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,581,684.

US 6,581,684 discloses a system and method that includes, with respect to claim 1, a method of heating a subterranean formation comprising: (a) forming a hole into said formation; (b) inserting into said hole a heater comprising a casing and plural fuel cells contained within said casing; (c) operating said fuel cells so as to produce heat and electricity; and (d) wherein the said formation, when heated, generates a gaseous product, and wherein said gaseous product is provided to and used by said fuel cells as fuel. The system comprises a formation/conduction/conductive heater 562 and fuel cells 100 as called for in the apparatus claims.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-8 and 12-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4-10 and 1-3, respectively of U.S. Patent No. 6,684,948. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant invention appear to be a broadened form of the US'948 patent claims. For example, claim 1, 2 of the instant invention appears to be a broadened form of claim 4 of the US'948 patent. Claim 12 of the instant invention appears to be analogous to the claim 1 of the US'948 patent. Claim 1 merely adds the limitation "wherein the manifold connects...cells," which was clearly taught by the US'948 patent. Therefore, it would have been considered obvious to one of ordinary skill in the art at the time the invention was made to have provided the claims of the instant invention within the US'948 patent in order to obtain broadened patent protection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zakiya W. Bates (formerly Zakiya Walker) whose telephone number is (571) 272-7039. The examiner can normally be reached on Monday-Friday, 8:30 AM-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Zakiya W. Bates
Primary Examiner
Art Unit 3676

zb
October 26, 2005